

*What Every Member of the
Trade Community Should Know About:*

Tires



AN INFORMED COMPLIANCE PUBLICATION

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U.S. CUSTOMS and BORDER PROTECTION

NOTICE:

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PREFACE

On December 8, 1993, Title VI of the North American Free Trade Agreement Implementation Act (Pub. L. 103-182, 107 Stat. 2057), also known as the Customs Modernization or “Mod” Act, became effective. These provisions amended many sections of the Tariff Act of 1930 and related laws.

Two new concepts that emerge from the Mod Act are “informed compliance” and “shared responsibility,” which are premised on the idea that in order to maximize voluntary compliance with laws and regulations of U.S. Customs and Border Protection, the trade community needs to be clearly and completely informed of its legal obligations. Accordingly, the Mod Act imposes a greater obligation on CBP to provide the public with improved information concerning the trade community's rights and responsibilities under customs regulations and related laws. In addition, both the trade and U.S. Customs and Border Protection share responsibility for carrying out these requirements. For example, under Section 484 of the Tariff Act, as amended (19 U.S.C. 1484), the importer of record is responsible for using reasonable care to enter, classify and determine the value of imported merchandise and to provide any other information necessary to enable U.S. Customs and Border Protection to properly assess duties, collect accurate statistics, and determine whether other applicable legal requirements, if any, have been met. CBP is then responsible for fixing the final classification and value of the merchandise. An importer of record's failure to exercise reasonable care could delay release of the merchandise and, in some cases, could result in the imposition of penalties.

Regulations and Rulings (RR) of the Office of International Trade has been given a major role in meeting the informed compliance responsibilities of U.S. Customs and Border Protection. In order to provide information to the public, CBP has issued a series of informed compliance publications on new or revised requirements, regulations or procedures, and a variety of classification and valuation issues.

This publication, prepared by the National Commodity Specialist Division of Regulations and Rulings is entitled “Tires”. It provides guidance regarding the classification of these items. We sincerely hope that this material, together with seminars and increased access to rulings of U.S. Customs and Border Protection, will help the trade community to improve voluntary compliance with customs laws and to understand the relevant administrative processes.

The material in this publication is provided for general information purposes only. Because many complicated factors can be involved in customs issues, an importer may wish to obtain a ruling under Regulations of U.S. Customs and Border Protection, 19 C.F.R. Part 177, or to obtain advice from an expert who specializes in customs matters, for example, a licensed customs broker, attorney or consultant.

Comments and suggestions are welcomed and should be addressed to U.S. Customs and Border Protection, Office of International Trade, Executive Director, Regulations and Rulings, 90 K Street NE 10th floor, Washington, D.C. 20229-1177.

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Office of International Trade

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INTRODUCTION

Everyone in modern civilization has in some way, at some point of their life depended upon tires. Whether it's a first bicycle, a car, the bus, a truck that delivers goods for purchase or the jet one travels in across the country, all of these have and need tires. However, very little information or guidance is offered in the Harmonized Tariff Schedule of the United States (HTSUS) or the Explanatory Notes (ENs) to the Harmonized System (HS) that can assist with the proper classification of tires. This publication will provide clarification of the principles for the classification of tires of Chapter 40 of the HTSUS. Statistics from U.S. Customs and Border Protection's (CBP) Office of International Trade show that nearly 121,700,000 tires for use on cars and trucks at a value exceeding 6.5 billion dollars were imported into the US in 2009. These figures do not include tires for other modes of transportation or heavy equipment. Additionally, Presidential Proclamation 8414, dated September 11, 2009 and Investigations 701-TA-448 and 731-TA-1117 by the United States International Trade Commission have resulted in additional payments being due upon the importation of certain tires. An understanding of proper classification of tires will provide clarification as to whether these additional payments are due.

According to the Encyclopedia Britannica, a tire is "a continuous band that encircles the rim of a wheel and forms a tread that rolls either on the road, a prepared track, or the ground". This may appear to be oversimplification, but in reality such terms as "encircles the rim of a wheel", "tread", "road" and "ground" are important both to general and specific tire classification. Originally, tires were the metal bands encircling wooden wheels to increase durability. This changed in the 1880's when tires of vulcanized rubber were applied to hansom cabs in London, improving comfort and traction, even though these were of solid rubber. In 1888, John Dunlop, began producing pneumatic tires for bicycles (tires that were to be softer, but would retain their shape by being filled with air) which contained a separate rubber bladder or tube. In 1895, Andre Michelin produced the first pneumatic rubber tires for automobiles. It wasn't until the 1950's when the Michelin Company introduced the radial-ply tire, that tires no longer required an inner tube.¹

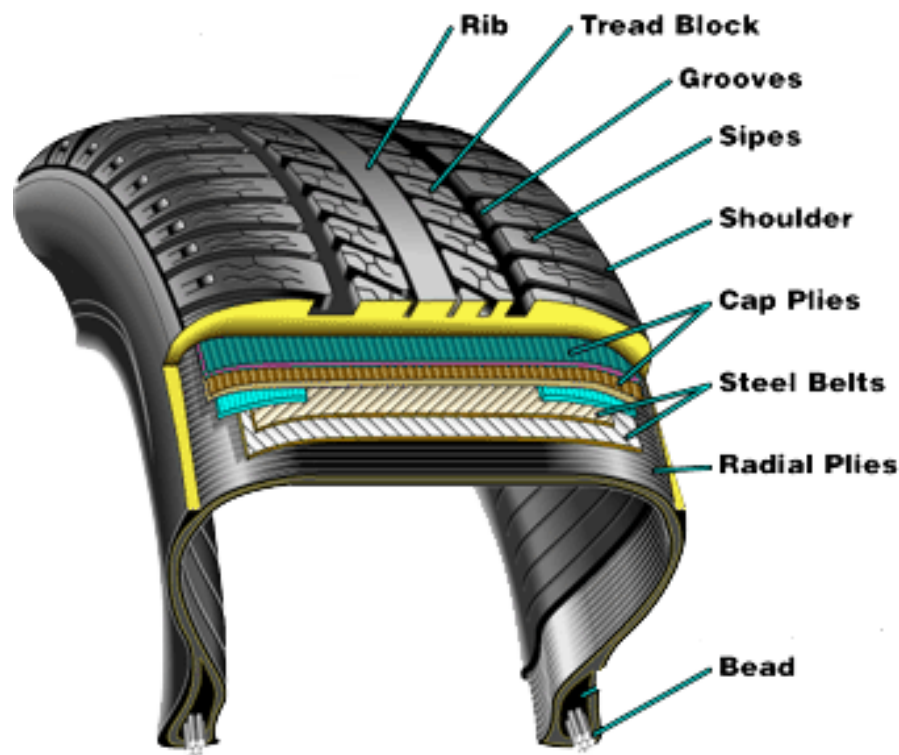
Approximately 30 different types of rubber are used to make a single tire. These rubbers are heated and blended under high pressure with other chemicals to form a gummy compound. The mix is cooled into slabs which are slit into strips to become sidewalls, treads or other parts of the tire. Fabrics such as polyester or nylon are also used on the inner surface of the tire strips as plies for strength and, when used in the sidewall, to increase resistance to deformation under heavier loads. These plies are also coated with rubber. Most vehicle tires also incorporate steel belts which serve to resist punctures and maintain the shape of the tread in order to achieve the best possible contact with the surface being traversed. Lastly, the rubber that will become the tread of the tire is applied. This assemblage is known as a "green tire". The green

¹ www.Britannica.com (Encyclopedia Britannica) 2010

tires are then cured. During curing, in hot molds under intense pressure, the shape of the tire and tread pattern are formed along with any sidewall markings.²

TIRE TERMINOLOGY

It is helpful, when classifying or examining tires, to be able to discuss a specific tire's construction in commonly recognized terms that describe the tire and its components. Here are some of the more important terms, several of which are illustrated in the diagram below. The diagram is for a passenger car type tire, but many of the features shown are standard and relative to most tires.³



Parts of the Tire

Bead: A hoop of steel wires which anchors the tires plies and conforms to the wheel rim to hold the tire and rim together.

Belt: Layers of steel or durable fibers to give tires strength with flexibility.

Plies: Layers of cord fabric and rubber that provide strength (cap plies) and reduce change of the tires shape when cornering under loads (radial plies).

Shoulder: The point where the tread meets the sidewall.

² http://eu.goodyear.com/uk_en/advice/tiretutor/makingatire/

³ http://www.taggartautorepair.com/discount_cooper_truck_and_car_tires.asp.

Sidewall: The area of the tire between the bead at the rim, and the tread.

Tread: The area of a tire designed to contact and interact with the road, track or ground.

Tread Pattern: The arrangement of grooves, ribs, blocks, sipes, etcetera to enhance grip for the tire's particular designed use.⁴ Tread patterns vary depending upon the intended use and application of the tire.

Parts of the Tread

Footprint: Area of tread that actually contacts the road, track or ground.

Grooves/Channels: Voids in the tread which allow water to drain outward from the footprint.

Lug/Tread Block: Patterned portions of tread area which contact the road, track or ground. Designs differ by maker and use of tire.

Rib: Unbroken circumferential tread surface.

Sipe: Lugs which are located at the outer edge of tread pattern and contact the shoulder.⁵

Other Terms

Tire flap: A ring of rubber which is fitted around the circumference of the rim, usually when used with tires requiring an inner tube. The tire flap protects the inner tube from damage that may occur when contacting the surface of the metal rim.

Bicycle Rim Strip: Similar in design and purpose to a tire flap, protecting the inner tube from the point where the spokes pass through the rim.

Inner Tube: A pneumatic rubber bladder which is installed around the rim of a tire that is not classified as tubeless, in order to maintain air pressure.

Tire Valve: Consists of a rubber mounting, a plastic cap, a brass valve body and a brass mechanism threaded into the core of the body. Depressing the stem of the valve mechanism allows air to flow into or out of the tire. The rubber mounting facilitates assembly of the valve to a wheel rim. The plastic cap seals and protects the valve mechanism when not in use. Tire valves are classified in HTS heading 84.81.⁶

⁴ Tire Glossary, Precision Measurement Equipment Laboratories; www.pmel.org Nov. 2009

⁵ Ibid.

⁶ NY G86497, February 6, 2001

TIRE TYPES

For the purposes of the HTSUS there are five types of tires:

Pneumatic: A flexible, hollow rubber tire which is inflated and maintains its shape by air pressure. Pneumatic tires may be of a tube type (having a separate inner tube which is filled with air within the body of the tire which has a construction permeable to air) or a tubeless design (which is constructed from coated layers and an inner coating of rubber which resists the passage of air through its constructed layers) commonly known as radial ply and standard on most cars today.^{7 8}

Retreads: Pneumatic tires which after inspection have been buffed down to remove all elements of the tread. Minor damage is then repaired, a new tread is applied to the circumference with an adhesive rubber/chemical layer and the tire is cured in a vulcanizing press. Retreads are quite often used on trucks and buses as a method of saving money.⁹

Semi-pneumatic Tires: Hollow tires which are not pressurized. They are lightweight, puncture proof and provide cushioning. Semi-pneumatic tires are usually imported as an assembly with a wheel as for lawn mowers, shopping carts and wheel barrows. Such an assembly at the time of importation would exclude the item from classification in HTS Chapter 40 (discussed in a later segment). The Michelin “Tweel”® would also be excluded from the classification category of a pneumatic tire.

Solid: Manufactured from solid rubber often in combination with plastic compounds via molding operations. (Note: Tires of plastic or essentially of plastic are not classifiable in Chapter 40 of the HTS and if not considered as “parts” of the article for which they are intended, would be classifiable in Chapter 39. See HQ 084214 of June 1989.) These are typically used for lawn mowers, scooters, and many types of light industrial vehicles, carts, and trailers. One of the most common applications for solid tires is for material handling equipment (forklifts).¹⁰

Cushion Tires: Similar in construction to a solid tire but with a sealed internal air space rather than containing pressurized air in order to maintain the shape. The inner cavity is at times filled with layers of rubber or dense foam prior to being sealed. (NY N100717, dated April 2010)

SIDEWALL MARKINGS

Most tires are described by an alphanumeric tire code which is generally molded into the sidewall of the tire. This code specifies the dimensions of the tire, and some of its key limitations, such as load-bearing ability, and maximum speed.

⁷ Encyclopedia Britannica Online, 2010.

⁸ <http://www.motorera.com/dictionary/PN.HTM>

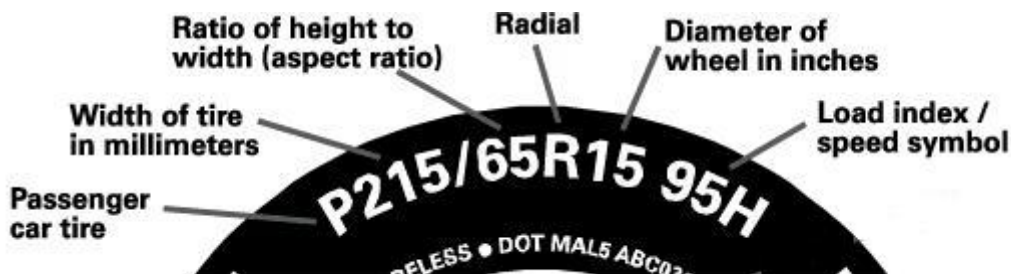
⁹ Understanding Retreading; pub: Tire Retread and Information Bureau, 2009.

¹⁰ <http://www.motorera.com/dictionary/PN.HTM>

Not all of the markings discussed here are mandatory, but they are intended to be a uniform industry standard for tires sold in the US. Pursuant to Department of Transportation regulations, each tire must be marked on each sidewall with the following information:

- (a) The symbol DOT, which constitutes a certification that the tire conforms to applicable Federal Motor Vehicle Safety Standards (FMVSS);
- (b) The tire size designation as listed in the documents and publications specified in S4.1.1 of FMVSS;
- (c) The maximum permissible inflation pressure, subject to the limitations of S5.5.4 through S5.5.6 of FMVSS;
- (d) The maximum load rating and for Light Truck tires, the letter designating the tire load range;
- (e) The generic name of each cord material used in the plies (both sidewall and tread area) of the tire;
- (f) The actual number of plies in the sidewall, and the actual number of plies in the tread area, if different;
- (g) The term “tubeless” or “tube type,” as applicable;
- (h) The word “radial,” if the tire is a radial ply tire; and
- (i) Alpine Symbol. A tire meeting the definition of a snow tire as defined in paragraph S3 may, at the option of the manufacturer, show the pictograph of a mountain with a snowflake. If the manufacturer chooses to mark the snow tire with the alpine symbol, the mountain profile must have a minimum base of 15 mm and a minimum height of 15 mm, and must contain three peaks with the middle peak being the tallest. Inside the mountain, there must be a six-sided snowflake having a minimum height of one-half the tallest peak.¹¹

There may be times when tires are imported which have markings common to foreign sales and these markings will be discussed later in this publication. The diagram below shows an example of the markings one may find. Though there are many others, use of the markings shown here is significant to classification.



The first designation used on the sidewall is the prefix. These prefix and suffix letters are used by the Tire and Rim Association, Inc., as voluntary designations of intended tire use and service conditions which may require different loads and inflations or rim

¹¹ U.S. Department of Transportation Federal Motor Carrier Safety Administration, §571.139 Standard No. 139; New pneumatic radial tires for light vehicles, available at <http://www.fmcsa.dot.gov/rules-regulations/administration/fmcsr/fmcsrruletext.aspx?reg=571.139>.

type. The numerical markings denote the tire size, load and speed capacity. In the sidewall diagram, the tire shown has a marking of P215/65R15 95H. As noted above the "P" indicates that this is designed to be used as a passenger car tire. The number 215 denotes the tire width in millimeters. The number 65 denotes the aspect ratio of the tire; the measurement of the tire from the inner bead to the tread is 65% of the measurement of the tire's width (215mm). The next symbol indicates that the tire is a radial tire (radial tires are the standard for automotive tires, although bias-ply tires are also used in off-road applications because of their stronger sidewalls and better traction). The load index and speed symbol indicate the limits of the tire's capacity to bear a load at a given inflation pressure and speed.

Some tires will not have all of the markings as diagramed above, including prefixes, if sold for European markets but imported into the US. Some of these tires have a rim diameter expressed in "half" inches omitting prefixes, such as 8.00R16.5LT (as well as 14.5, 15.5, 17.5 or 19.5).

THE CLASSIFICATION OF TIRES UNDER THE HTSUS

Classification under the HTSUS is made in accordance with the General Rules of Interpretation (GRIs). GRI 1 provides that the classification of goods shall be determined according to the terms of the headings of the tariff schedule and any relative section or chapter notes. In the event that the goods cannot be classified solely on the basis of GRI 1, and if the headings and legal notes do not otherwise require, the remaining GRIs 2 through 6 may then be applied in order. GRI 6 requires that the classification of goods in the subheadings of headings shall be determined according to the terms of those subheadings, any related subheading notes and *mutatis mutandis*, to the GRIs 1 through 5.

Tires are classified in one of two headings under the HTSUS: heading 4011, which provides for new pneumatic rubber tires, or heading 4012, which provides for used or retreaded rubber tires as well as solid (non-pneumatic) tires. Thus, the first question that one must ask to determine the classification of tires is whether or not the merchandise is a new tire or a retreaded tire. If the merchandise is a new pneumatic rubber tire then the product is classified in heading 4011, HTSUS. Heading 4011, HTSUS, is then subdivided into seven subheadings, which are further broken out into various other subheadings. There are seven comparable subheadings that must be considered at the second step. The individual subheadings are provided below.

4011	New Pneumatic Tires, of rubber
4011.10	Of a kind used on motor cars (including station wagons and racing cars):
4011.20	Of a kind used on buses or trucks:
4011.30	Of a kind used on aircraft...
4011.40	Of a kind used on motorcycles...

4011.50	Of a kind used on bicycles...
	Other, having a "herring-bone" or similar tread:
4011.61.00	Of a kind used on agricultural or forestry vehicles and machines...
	* * *
	Other:
4011.92.00	Of a kind used on agricultural or forestry vehicles and machines...
	* * *

In order to classify new pneumatic tires in particular subheadings of heading 4011, HTSUS, CBP applies *United States vs. Carborundum Co.*, 536 F.2d 373 (C.C.P.A. 1976), to determine whether or not the tire is of a class or kind described by the first five subheadings. Failing classification in one of those five subheadings then the merchandise is classified in one of the two basket subheadings, depending on whether or not the merchandise has a herring-bone tread.

The Court of Customs and Patent Appeals held in *Carborundum* that the following factors should be used to determine the principal use of a particular good: (1) the general physical characteristics of the merchandise; (2) the channels, class or kind of trade in which the merchandise moves; (3) the expectation of the ultimate purchasers; (4) the environment of the sale (i.e., accompanying accessories and the manner in which the merchandise is advertised and displayed); (5) usage, if any, in the same manner as merchandise which defines the class; (6) the economic practicality of so using the import; (7) the recognition in the trade of this use. *Id at 377. See also, Lennox Collections v. United States*, 20 CIT 194, 196 (1996). All the *Carborundum* factors interrelate and one factor being met, does not necessarily decide classification. For example, a tire's sidewall markings may indicate the intended use of the tire with All Terrain Vehicles, while the tire may possess physical characteristics such as a simple tread pattern, size and high load range appropriate for a trailer. Such a tire may therefore not actually be suitable for All Terrain Vehicle use. One should closely review all factors to make a proper classification decision.¹²

PHYSICAL CHARACTERISTICS OF THE TIRES

The physical characteristics of a tire which are most relevant to its classification are the tire size and weight, load capacity, speed rating and tread pattern. Much of the information regarding the physical characteristics of a given tire is provided in the sidewall markings. These markings consist of codes of letters or numbers indicating the tire's section width, aspect ratio, the diameter of the wheel the tire is intended for, the ply rating, load range, load index, speed rating, and suggested use. The information that appears on the tire's sidewall should also be listed on the commercial invoice. We will first discuss the general physical characteristics of the tire and any corresponding markings, then the sidewall markings indicating the suggested use of the tire.

¹² CBP Memorandum to Field Operations, "Guidance: Effective September 26, 2009, 35% ad valorem duty on Chinese tires for passenger cars and light trucks." 9/09

Tire Size

The tire diameter in inches and the aspect ratio (ratio of height to width) will be displayed on the sidewall of the tire. These numbers are important to tire buyers as they affect the type of performance one can expect from the tire, and would further determine the best use. For example, high performance tires (the tires with wide treads on larger rims that show little tire profile from the side) might have an aspect ratio of around 40 or only 40% of the width of the tire. These measurements can affect speed rating, cornering, tread wear and resistance to road hazards.¹³ The tire size is a good indicator of the type of vehicle for which the tire is intended, and will consequently guide the marketing of the tire.

Load Capacity

The load capacity of a tire is the potential load that it can handle safely at a given inflation pressure and speed. The load capacity is indicated by three measurements, which are marked on the sidewall of the tire, and should be listed on the commercial invoice. These indicators are the load range, the ply rating and the load index.

The Load Range is noted with a letter designation of A through N. They are used to identify the load bearing and inflation limits of a given size tire when used in a specific type of service. The higher the load range, the higher the air pressure and weight support the structure of the tire will allow.¹⁴ This indicator can be used as a guide in classification but should not be used as the sole or primary consideration when deciding for what type of vehicle the tire was designed. There are instances where tires are sized and designed for lighter trucks and have higher than average load ranges due to the needs of the user to carry great weights, as in NY rulings N078135 and N082938 of October 29, 2009 and November 27, 2009, respectively. For example, a pickup truck used to haul heavy construction materials such as bricks would use the same size tire as a pickup truck used to take the family camping on weekends. However, the load range for the tires on the truck used for construction materials would have to be higher to avoid handling problems and tire damage.

The Ply Rating is used to identify the load carrying capabilities of a tire in terms of plies. It is an index of the strength and does not necessarily represent the actual number of cord plies in a tire.¹⁵ Ply rating originally referred to the number of cotton layers used to strengthen a tire's casing. Today, when tires are labeled 10-ply, they are not actually constructed of 10 individual layers of cotton but offer the equivalent strength.¹⁶ A high ply rating means a stiffer sidewall, which in turn makes for a bumpier ride as the tire gives less when encountering bumps or potholes. This can be helpful in determining use; a very stiff sidewall (a ply rating higher than 14), would be uncomfortable for a passenger vehicle, lower shock absorption of the tire. Again, this

¹³ <http://www.edmunds.com/ownership/howto/articles/43860/article.html>

¹⁴ The Tire and Rim Association Yearbook, 2010.

¹⁵ The Tire and Rim Association Yearbook, 2010.

¹⁶ http://www.tireteam.com/info_loadrange

designation may be helpful in determining what weight loads a tire can be subjected to but it should not be used as the sole determining factor in classification.¹⁷

The Load Index is a numerical code (see previous diagram) also associated with the maximum load a tire can carry at a specific speed (which should be indicated by the speed symbol located next to the load index on the sidewall).¹⁸ As mentioned before, this designation may be helpful in determining what weight loads a tire can be subjected to and may assist in classification, but it should not be used as the sole or primary determining factor of classification.

In summary, in reviewing these three indicators (load range, ply rating and load index) one finds that tires of similar design and intended use for the same class of vehicles may have weight bearing capabilities that exceed what is typical for those vehicles. This does not result in the tire being less appropriate in design for a particular type of vehicle; it is simply intended to be used for that vehicle under certain conditions or requirements.

Speed Rating

The speed rating is the maximum speed at which the tire can carry a load corresponding to its Load Index. In the previous diagram it is the final letter “H”. These letter designations are based on a ratio of maximum speed capabilities, wheel position, weight load and air pressure. These symbols, as dependent upon vehicle type and capabilities, are not standardized sufficiently to significantly aid in tire classification as other indicators might.

Tread Pattern

The tread pattern of the tire can be a helpful criterion in the classification of many different types of tires. The tread pattern of the tire is also a specific criterion for classification in certain subheadings of heading 4011, HTSUS. For example, certain tires are classified in subheadings 4011.61 to 4011.69 if they have a herring-bone or similar tread. Herring-bone and similar treads are explained in further detail in the discussion of specific subheading breakouts in heading 4011.

Note, however, that a “herring-bone” tire tread is a relevant factor for classification only for tires falling under subheadings 4011.61-4011.69 or 4011.92-4011.99, HTSUS. New pneumatic tires of subheadings 4011.10-4011.50, HTSUS, are classified depending on their specific use (whether they are used on cars, trucks, buses, etc.) whatever their tread, and also depending on their size and construction (radial or other).

However, the tread pattern can still be a helpful factor in the classification of tires in any subheading of 4011, as it can be highly suggestive of intended use. Examination of the

¹⁷ NY Ruling N082938

¹⁸ The Tire and Rim Association Yearbook, 2010.

tread depth, size of the lugs, space between the lugs, etc. will indicate suitability for certain general purposes. For example, a tire with a more aggressive tread, featuring deep, widely spaced lugs, will provide a better grip in dirt, mud, sand, etc., and is therefore likely to be used in agricultural or forestry applications. On the other hand, a tire with a smooth tread, small grooves, and shallow lugs is more likely to be a tire for on-road use. A tire for a passenger car or light truck, however, will require a tread with greater traction than tires for trailers.

Directional treads are also relevant to the use of the tire. Directional treads such as the v-shaped herring-bone tread are meant to direct mud and snow towards the outside of the tire, to avoid accumulation of such matter on the tire.

Rolling Resistance

Rolling resistance occurs when a round object such as a ball, wheel or tire rolls on a surface. It is caused mainly by the deformation of the object and the deformation of the surface. For example, a flexible rubber ball pushed along a polished metal surface will deform due to the weight of the force used to push the ball forward. This creates a larger surface area, causing more of the ball to come into contact with the polished metal surface. This in turn creates more friction and rolling resistance, slowing the ball down as it rolls. A rubber ball on a sandy beach will also deform, and so will the surface of the sand, leading to even more rolling resistance. Thus, a more flexible tire will lead to greater rolling resistance, particularly during rapid deceleration. The deformation of the tire brings more of the tire in contact with the ground, creating more braking friction and allowing the tire to stop. On the other hand, a tire with stiff sidewalls (which would make the tire a poor choice for passenger comfort), would prevent this deformation and create less friction with the ground, thus having a lower rolling resistance. Such a tire would have little traction and would most likely slide when braking force is applied.

The Society of Automotive Engineers (SAE) has devised tests which calculate the rolling resistance of a tire. These are the SAE J1269 and the SAE J2452. The results of these tests may be requested from an importer as proof of construction and design, particularly in the case of claimed trailer use.

SIDEWALL MARKINGS: PREFIXES, SUFFIXES AND INTENDED USE

The first designation used on the sidewall is the prefix. These prefix and suffix letters are used by the Tire and Rim Association, Inc., as voluntary designations of intended tire use and service conditions which may require different loads and inflations or rim type.

The prefix and/or suffix letter, when present, often designate a particular type of vehicle for which the tire is designed. The prefix or suffix is assigned to a tire by the manufacturer based upon design, construction and tolerances. These designations are voluntary and not always reliable. For example, a tire might bear an LT prefix but

actually be designed for use on some heavy-duty trailers, heavy-duty light trucks or box vans.¹⁹

The following are lists of the prefixes and suffixes used. Note that because the prefix/use markings are voluntary, one must also rely on other factors such as construction of the tire and marketing. However, the prefix and suffix designations may be suggestive of intended use.

The common prefixes used are:

AT – Intended for use on All Terrain Vehicles.

DH – Intended for agricultural and logging vehicles with one piece, drop center rim.

IF – Radial agricultural tire allowing for high deflection.

LT – Primarily intended for service on light trucks.

M + S or M & S – Designed to be capable of handling increased levels of mud and snow but only considered a “snow tire” if it includes a “snowflake” in the prefix.

P – Intended for service on passenger cars.

ST – On road trailer use.

T – For temporary use as a spare.

VA - Intended for agricultural and logging vehicles with a multi-piece rim.

The common suffixes used are:

FI – Intended for use on farm implements (not vehicles) with limited on road towing.

HC – Heavy duty truck tire for use on tapered “HC” rims. This suffix is intended to differentiate among tires for passenger, light truck and other vehicles with similar markings.

LT – Light truck tires capable of being used on smaller trucks, busses, trailers and multi-purpose passenger vehicles.

M/C – Motorcycle tires.

MH – Tires for motor homes.

ML – Intended for mining and logging vehicles with intermittent on road use.

NHS – Not intended for highway or on road use. Often found on agricultural tires.

SL – Limited only to agricultural use.

SS – Off road tires for skid steer and forklifts.

ST – Tires for use on road trailers.

TR – Tires for use on trucks, busses and other large vehicles. This suffix is intended to differentiate among tires for passenger, light truck and other vehicles with similar markings.²⁰

P- Metric vs. Euro metric Tires

At times, tires will be imported without a prefix and only the size such as 225/60R16. These are often Euro Metric tires designed for the European market but legally sold in

¹⁹ <http://www.tirerack.com/tires/tiretech/techpage.jsp?techid=46>

²⁰ Yearbook of the Tire and Rim Association, Inc. 2010.

the US. The major difference in these Euro Metric tires and the P-Metric tires whose prefixes were discussed previously is only the lack of those prefixes.

Additionally, one should keep in mind that Euro metric and P-metric tires in the same size (i.e. P225/60R16 & 225/60R16) are equivalent in their dimensions with minor differences in their load capacity calculations and inflation pressure tables. If Euro metric and P-metric tires have the same numeric size, the same tire performance category and the same speed rating, the two are considered equivalent and interchangeable.²¹

THE OTHER CARBORUNDUM FACTORS

In addition to examining the physical characteristics of the tires and the sidewall markings, it is necessary to examine the remaining *Carborundum* factors: the expectation of the ultimate purchasers; the channels, class or kind of trade in which the merchandise moves; the environment of the sale” (advertising and display); the use, if any, in the same manner as merchandise which defines the class; the economic practicality of so using the import; and the recognition in the trade of this use.

These factors may be applied to the proper classification of tires as follows: Does the tire have an appropriate size, tread pattern and structural design to be appropriate for a specific use? An aggressive tread pattern serves no purpose on a utility trailer. Will the purchaser find after installation that the tires are appropriate to the intended vehicle and use or will they result in poor handling by being designed for capacities or tolerances that are beyond those needed and therefore not respond properly in average use? Are the tires sold through the typical sellers of such tires, such as passenger car tires being sold at typical automotive tire retail and installation outlets rather than solely at a boat retailer who also sells trailers for boats? Are the tires advertised in magazines, newspapers and on the internet by outlets typical to their type; and/or shown in displays or ads as being used for a specific purpose? Are the tires typical in comparison to others designed, marketed and used for the purpose stated? Are they properly priced for the market they are intended and of the proper quality to perform adequately in relation to cost? Do tire makers and users typically consider the tire in question as commonly designed for a specific application?

All of these points should be considered if the information is available. None is generally more important than any other. One must, even in the presence of “Carborundum” and the other factors discussed here, realize that there are often going to be exceptions, grey areas or scenarios which are not typical when reviewing tires. However, in most cases, by the application of the four factors mentioned here (markings, design, load range and the several points of “Carborundum”) one can make an educated decision on classification.

²¹ <http://www.tirerack.com/tires/tiretech/techpage.jsp?techid=24>

CLASSIFICATION OF TIRES UNDER HEADING 4011, HTSUS

We now continue with a discussion of the specific subheadings at issue in heading 4011, HTSUS. Always keep in mind the available information concerning the particular tire based on the factors previously presented in order to determine if its design and features are appropriate to a certain purpose or use. Furthermore, the headings and subheadings of Chapter 40, although they mention particular classes of machines and vehicles, are not intended to be subject to the classification of vehicles, but to the design and designation of the tire itself.

4011.10 New, pneumatic tires, of rubber, of a kind used on motor cars

This subheading includes both radial and non-radial tires which are designed for use on motor cars. "Motor cars" includes certain vehicles classified in heading 8703, HTSUS, such as passenger cars, station wagons, and racing cars. The primary indicator of a tire which fits this subheading for classification would be the prefix "P". However, all other factors must be considered. A racing car tire will obviously not have a "P" prefix and may in fact have what is commonly known as a "slick" tread.

The question sometimes arises as to the classification of tires for antique passenger cars. These tires, which are typically narrow with a considerably large rim diameter, would also be classified in this subheading. There is no special provision and the tires themselves are not antique, but new.

4011.20 New pneumatic tires, of rubber, of a kind used on buses or trucks

This subheading includes both radial and non-radial tires which are designed for use on buses and trucks of all sizes. This subheading is broken down further into radial or other bus or truck tires, for on highway and off-highway use. If a tire is designed for both on highway and off-highway use, and neither use can be determined as predominant based upon any of the factors previously discussed, one may have to resort to dependence on General Rule of Interpretation 3(c) to the HTSUS and classify the tire as being for off-highway. However, all efforts should be made based upon the parameters of markings, design and "Carborundum" factors to determine a primary use.

It must also be considered that trucks are not limited to those machines in Chapter 87. The Explanatory Notes to the HTSUS identify "other trucks" in heading 8427 and these must be considered based upon their design. However, there are numerous machines identified as classifiable in chapter 84 that move on tires but are not trucks. These would include excavating machines of heading 8429, construction machines and snow plows of heading 8430, agricultural machines of heading 8432 and harvesting machines of heading 8433. Although they all may be designed in some instances to roll on tires, they are not trucks, but machines, and their tires would be classifiable further on in heading 4011.

4011.30.00 new pneumatic tires, of rubber, of a kind used on aircraft

Sizes of aviation tires vary considerably, as do the aircraft for which they are intended. They are made of lightweight but durable materials to both reduce aircraft weight and withstand landings and severe braking. The tread pattern is a simple rib pattern solely designed to maintain direction and channel water to avoid hydroplaning. The FAA requires that new aviation tires meet minimum performance standards and after receiving technical standard order (TSO) authorization, be marked with: the TSO number; balance marker, consisting of a red dot, on the sidewall of the tire immediately above the bead to indicate the lightweight point of the tire; brand name and the name or registered trademark of the manufacturer responsible for compliance; production date code; part number; plant code; ply rating; serial number; size and load ratings; skid depth; speed rating in miles per hour; marking “tube type” if so; and marking “non-retreadable” if so.²² Aircraft tires have a free rate of duty and do not carry the “C” indicator in the HTSUS often afforded for duty free treatment as civil aircraft components.

4011.40.0000 new pneumatic tires, of rubber, of a kind used on motorcycles

Motorcycles are considered to be two or three wheeled vehicles that do not have automotive type steering. This would typically be a handle bar mechanism directly connected to the front wheel. However, this should not be construed as meaning that all tires for vehicles considered by classification to be motorcycles are motorcycle tires. A number of these vehicles, particularly three wheel off the road vehicles, use a wide aggressive tread tire for travel on mud and soft ground. These tires would not be considered motorcycle tires but “other” tires. As previously noted, motorcycle tires should be marked with the suffix “M/C”. Treads vary greatly depending upon the type of motorcycle and needs of the user.²³

4011.50.0000 new pneumatic tires, of rubber, of a kind used on bicycles

This classification includes all forms of bicycle tires, including road racing tires and mountain bike tires, and tires that can be imported as bicycle tires if properly designed and sized though the ultimate user might use them for other human-powered vehicles such as unicycles or certain wheel chairs, bicycle trailers, wheelbarrows and jogging strollers. However, if specially designed for something other than a bicycle and imported as such, these would be classifiable in HTSUS 4011.93.8000. Again, as with certain vehicle tires, “Carborundum” factors and research online and elsewhere should also be considered.

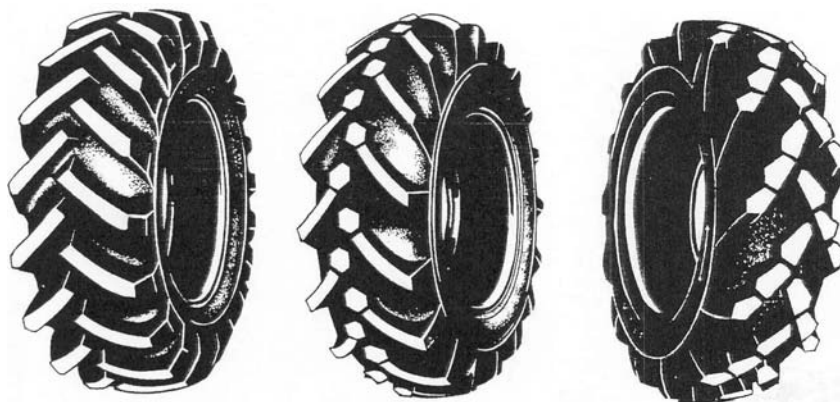
²² FAA Technical Standard Order TSO-C62e, 9/26/06

²³ Explanatory Note 87.11 to the Harmonized Tariff System of the United States

New pneumatic tires, of rubber: other

This publication will review the “other” tires of HTS heading 4011 as a group as certain similarities and comparisons make this appropriate to understanding the classifications. The tires in the initial subheadings 4011.61 through 4011.94 are not for passenger vehicles, trucks (either on or off-highway), buses or any of the uses discussed previously in this publication. Classification of the tires in these headings depends heavily on the size and design of the tire, particularly the tread, and the use for which they are designed and marketed, which will again depend on a review of the previously mentioned “Carborundum” factors. When classifying the tires which are appropriate to these headings one must strictly adhere to the practice of classifying by subheadings at comparative indentations of the HTSUS and in numerical order. As one will see by the explanation here, this methodology, which is proper throughout the HTSUS, will simplify classification by comparison and elimination.

The first indentations of subheadings to be compared are “having a ‘herring-bone’ or similar tread” versus “other”. In this context, “Other” includes tires, not falling into subheadings 4011.10-4011.50, with any other tread pattern besides herring-bone. Although the EN’s of chapter 40 are limited concerning tires, they do in fact offer eight drawings of herring-bone tire tread patterns. Although not all inclusive, and keeping in mind that the subheading itself states “or similar” the drawings are helpful. They establish that a herring-bone pattern is one which has alternating stripes of raised tread strips, or lugs, on a consistent angle from either sidewall to the center of the tread area. These tread lugs may be one solid lug from sidewall to center for each strip or a series of lugs which are aligned on the necessary angle or a combination of a strip of tread and lugs forming the angled stripe. There are no other lugs or treads besides these angle stripes. The following are three of the drawings which are most representative of what we have presented here, taken from the Explanatory Notes.



The next consideration to be compared, once one has determined whether or not the tires potentially classifiable in 4011.61 through 4011.94 are of a herring-bone pattern, is whether they are designed and intended for use on certain machines. In general, these machines (agricultural, forestry, construction, industrial handling) are provided for in Chapter 84 of the HTSUS. Exceptions would be those in heading 8705 which have stacking mechanisms but do not lift goods onto the trucks and those of 8709 which have

platforms for transporting loads placed on them. There have been questions regarding tires used on agricultural machines and those used on vehicles of a smaller size that are used occasionally in agricultural pursuits. To consider such tires as for an agricultural machine they would have to be designed primarily for use on such machines or vehicles that are solely or principally for agricultural use. Tires which can be equally used on both a small agricultural machine and likewise, a utility cart used on golf courses, would not be considered classifiable as for agricultural use.

One type of tire that has been ruled to go into subheading 4011.99 is designed specifically for use on motorhomes.²⁴ Pneumatic replacement tires for large hand trucks, baggage carts and other devices which use tires that are not previously enumerated in the HTSUS would also go into 4011.99. As an “other” classification, there is always potential for new tires to go into this heading.

PRESIDENTIAL PROCLAMATION 8414 OF SEPTEMBER 11, 2009

The President of the United States, Barack Obama, signed the above proclamation entitled “To Address Market Disruption from Imports of Certain Passenger Vehicle and Light Truck Tires from the People’s Republic of China”. As issued, this proclamation expired September 26, 2012. The proclamation imposed additional duties on “new pneumatic tires, of rubber, from China, of a kind used on motor cars (except racing cars) and on-the-highway light trucks, vans, and sport utility vehicles, provided for in subheadings 4011.10.10, 4011.10.50, 4011.20.10 and 4011.20.50”.²⁵

The elementary part of this proclamation is the fact that it includes all of the tires that can be entered into commerce under subheading 4011.10 except those designed, produced and intended for use as racing car tires. This includes but is not exclusive to all tires with a “P” prefix. It includes passenger car tires that are radial or non-radial. It also includes tires for antique passenger cars. All Terrain Vehicle tires, however, are excluded from the scope of the proclamation.²⁶

The more complex matter arises in determining the applicability of the proclamation to tires of subheading 4011.20 (tires of a kind used on buses or trucks). The only two statistical subheadings under 4011.20 which are affected are 4011.20.1005 and 4011.20.5010, which provide for new, pneumatic tires which are radial or non-radial for on-the-highway light trucks. At this point it is imperative to keep in mind that classification of tires in subheading 4011.20, as with 4011.10, is based upon the factors we have previously set forth in this publication. Marking, design, tolerances and intended use are based upon “Carborundum” factors and not necessarily on the importer’s claimed use. Additionally, there is no definition within the HTSUS or the EN’s of a “light truck”. Finally, no tire is specifically and solely intended for use on a specific make or model of car or truck. Therefore, as one cannot identify a particular use of the tire based upon a suggested vehicle type, one also cannot define or classify a tire

²⁴ NY Ruling N084638, 12/10/09

²⁵ Federal Register, Vol. 74, No. 179 pp.47861-47862

²⁶ http://www.cbp.gov/xp/cgov/trade/trade_programs/entry_summary/laws/advalorem_chinese_tires.xml

based solely upon its being called a “light truck tire” as we have no statutory or precedential guidance to identify said truck. One must therefore classify tires, which may potentially be subject to the additional duties set forth in the proclamation, based upon the classification criteria discussed above.

In order to assist in the proper classification of those tires, which are potentially but not clearly, subject to the additional duties of the proclamation, a summary of the information that one should make all attempts to acquire in order to make a determination is presented here. Though the emphasis here is on “light truck” tires, this information applies when classifying any vehicle tires.

One should, whenever possible, review:

- 1) All sidewall markings including any prefix or suffix letters, size (or range of sizes) and the load range which is indicated by a letter designation. The reasoning behind this is that the prefixes and suffixes may indicate intended use or design. The rim dimension may indicate the size of the vehicle however one must also consider this in respect to the aspect ratio as some custom tires and rims may be of an inordinate size compared to what is normally standard for the vehicle. Based upon all information gleaned at the time of this publication, an LT tire is designed for a light truck even though it may be marketed by some outlets for other uses as well.²⁷
- 2) A photograph or diagram of the tread pattern. This may indicate intended use by the design of the tread. It can range from a simple rib pattern usually found on trailer tires of the type used on boat trailers or front mounted truck tires and such. Or it may be a deep aggressive tread suitable for off-road use that would not wear well on pavement. Tires for passenger cars and on the road light trucks typically have a tread pattern that allows for both water channeling (circumferential) and traction (laterally).
- 3) The exact brand name and model as imported. This can be helpful in determining the environment of sale and channels of trade. A tire, as with many articles, may be invoiced with no, little, or less than definitive information as to its intended use based upon design and engineering. By researching the tire through print or internet advertising one can often determine for what use and to whom they are being marketed and sold. One may even find reviews of the tire which would state how it performs in certain uses. Often, foreign manufacturer internet sites will have helpful information regarding the intended use or market for a particular tire.
- 4) When possible, the importer or manufacturer may be able to supply information as to design features which make the tire appropriate to certain classes of vehicles or uses.

²⁷ The Tire and Rim Association Yearbook, 2010.

None of the above pieces of information are necessarily definitive nor does any one factor necessarily carry more weight than any other, but at times, one factor will in fact help determine the classification more than others. Each tire, particularly in the realm of those which may or may not be “light truck” tires, must be considered based on its own qualities and characteristics. At times much of this information will be available and at times little of it will. By using the above information and reviewing it carefully, one can responsibly arrive at a fair and correct classification that can be supported by facts.

TIRES OF HEADING 4012

Retreaded Tires

Tires for trucks and large machines, particularly those in construction, are costly. A popular way to reduce this expense by industrial companies is the use of retreaded tires. These are tires which have been inspected, had the tread shaved off and flaws removed and had a new tread applied.²⁸

Used Tires

Used tires are those which have previously been installed on a vehicle or machine for use on that device. Used tires do not include those that have been chopped, shredded or otherwise lost the appearance of a tire. Such importations, usually for the purpose of recycling, are classifiable in heading 4004 of the HTSUS.²⁹ Classification of retreaded and used tires within heading 4012 follows the same principles as in heading 4011, such as intended use and design.

Solid and Cushioned Tires

Certain vehicles or machines, such as forklifts or skid steers, use solid or cushioned tires. They are also found on some starter bicycles, hand trucks, wagons, and small construction machines such as the “Bobcat®”. These tires have little or no cushion or flex to them and as a result cannot be installed on rims with the same ease as pneumatic tires. Installation, when done by the owner, is often on a two piece rim which is bolted together at the center.

It is important to note here, as it is often the case with solid tires, that when a tire of any type is imported already mounted on a rim or wheel it is no longer a tire for classification purposes but an assembly and usually considered as a part of the device for which it is designed.³⁰

²⁸ <http://www.retread.org>

²⁹ NY Ruling B89748, 10/17/97

³⁰ NY N034782, 8/15/08; NY R00416, 6/2/04; NY R00015, 4/15/03

ADDITIONAL INFORMATION

The Internet

The home page of U.S. Customs and Border Protection on the Internet's World Wide Web, provides the trade community with current, relevant information regarding CBP operations and items of special interest. The site posts information -- which includes proposed regulations, news releases, publications and notices, etc. -- that can be searched, read on-line, printed or downloaded to your personal computer. The web site was established as a trade-friendly mechanism to assist the importing and exporting community. The web site also links to the home pages of many other agencies whose importing or exporting regulations that U.S. Customs and Border Protection helps to enforce. The web site also contains a wealth of information of interest to a broader public than the trade community. For instance, the "Know Before You Go" publication and traveler awareness campaign is designed to help educate international travelers.

The web address of U.S. Customs and Border Protection is <http://www.cbp.gov>

Customs Regulations

The current edition of Customs and Border Protection Regulations of the United States is a loose-leaf, subscription publication available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800. A bound edition of Title 19, Code of Federal Regulations is also available for sale from the same address. All proposed and final regulations are published in the Federal Register, which is published daily by the Office of the Federal Register, National Archives and Records Administration, and distributed by the Superintendent of Documents. Information about on-line access to the Federal Register may be obtained by calling (202) 512-1530 between 7 a.m. and 5 p.m. Eastern time. These notices are also published in the weekly Customs Bulletin described below.

Customs Bulletin

The Customs Bulletin and Decisions ("Customs Bulletin") is a weekly publication that contains decisions, rulings, regulatory proposals, notices and other information of interest to the trade community. It also contains decisions issued by the U.S. Court of International Trade, as well as customs-related decisions of the U.S. Court of Appeals for the Federal Circuit. Each year, the Government Printing Office publishes bound volumes of the Customs Bulletin. Subscriptions may be purchased from the Superintendent of Documents at the address and phone number listed above.

Importing into the United States

This publication provides an overview of the importing process and contains general information about import requirements. The current edition of *Importing Into the United States* contains much new and revised material brought about pursuant to the Customs Modernization Act ("Mod Act"). The Mod Act has fundamentally altered the relationship between importers and U.S. Customs and Border Protection by shifting to the importer the legal responsibility for declaring the value, classification, and rate of duty applicable to entered merchandise.

The current edition contains a section entitled "Informed Compliance." A key component of informed compliance is the shared responsibility between U.S. Customs and Border Protection and the import community, wherein CBP communicates its requirements to the importer, and the importer, in turn, uses reasonable care to assure that CBP is provided accurate and timely data pertaining to his or her importation.

Single copies may be obtained from local offices of U.S. Customs and Border Protection, or from the Office of Public Affairs, U.S. Customs and Border Protection, 1300 Pennsylvania Avenue NW, Washington, DC 20229. An on-line version is available at the CBP web site. *Importing into the United States* is also available for sale, in single copies or bulk orders, from the Superintendent of Documents by calling (202) 512-1800, or by mail from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000.

Informed Compliance Publications

U.S. Customs and Border Protection has prepared a number of Informed Compliance publications in the "*What Every Member of the Trade Community Should Know About...*" series. Check the Internet web site <http://www.cbp.gov> for current publications.

Value Publications

Customs Valuation under the Trade Agreements Act of 1979 is a 96-page book containing a detailed narrative description of the customs valuation system, the customs valuation title of the Trade Agreements Act (§402 of the Tariff Act of 1930, as amended by the Trade Agreements Act of 1979 (19 U.S.C. §1401a)), the Statement of Administrative Action which was sent to the U.S. Congress in conjunction with the TAA, regulations (19 C.F.R. §§152.000-152.108) implementing the valuation system (a few sections of the regulations have been amended subsequent to the publication of the book) and questions and answers concerning the valuation system.

Customs Valuation Encyclopedia (with updates) is comprised of relevant statutory provisions, CBP Regulations implementing the statute, portions of the Customs Valuation Code, judicial precedent, and administrative rulings involving application of valuation law. A copy may be purchased for a nominal charge from the Superintendent of Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7054. This publication is also available on the Internet web site of U.S. Customs and Border Protection.

The information provided in this publication is for general information purposes only. Recognizing that many complicated factors may be involved in customs issues, an importer may wish to obtain a ruling under CBP Regulations, 19 C.F.R. Part 177, or obtain advice from an expert (such as a licensed Customs Broker, attorney or consultant) who specializes in customs matters. Reliance solely on the general information in this pamphlet may not be considered reasonable care.

Additional information may also be obtained from U.S. Customs and Border Protection ports of entry. Please consult your telephone directory for an office near you. The listing will be found under U.S. Government, Department of Homeland Security.

“Your Comments are Important”

The Small Business and Regulatory Enforcement Ombudsman and 10 regional Fairness Boards were established to receive comments from small businesses about Federal agency enforcement activities and rate each agency’s responsiveness to small business. If you wish to comment on the enforcement actions of U.S. Customs and Border Protection, call 1-888-REG-FAIR (1-888-734-3247).

REPORT SMUGGLING 1-800-BE-ALERT OR 1-888-NO-DROGA



Visit our Internet web site: <http://www.cbp.gov>